

Institute announces final design for new nanotech laboratory

*\$350 million facility will stand in
the current location of Building 12*

By Kath Xu
NEWS EDITOR

Starting in spring 2018, MIT nanotechnology researchers will no longer have to go to Harvard to find suitable lab equipment. On Tuesday, MIT announced that it has committed \$350 million to the construction of a new state-of-the-art nanoscale research facility.

Dubbed “MIT.nano,” this building will be located at the heart of MIT’s campus and take four years to complete. Construction will begin in June, but will significantly affect access to parts of campus near Building 12, the future site of the new structure.

Currently, most MIT nanoscale researchers either do their work in the Microsystems Technology Laboratories in Building 39 or in their own small labs.

“If you look at the trend of the young professors coming into MIT, the disciplines we’re developing at MIT, the student interests, the world needs — if you look at all of those, the component of nanotechnologies just permeates everything that we do,” said Prof. Vladimir Bulovic, the faculty lead on this project and MIT School of Engineering’s Associate Dean for Innovation.

Bulovic estimates that over 2,000 researchers will make use of the new facility. One of these researchers is Prof. Polina Anikeeva



COURTESY OF WILSON ARCHITECTS

MIT.nano from in front of Building 13, looking east toward Building 26.

PhD ’09, who uses nanomaterials to develop minimally invasive medical treatments.

“For a long time, [nanotechnology] was just science and we were

playing in the lab and doing measurements and it was really fun,” said Anikeeva. “But now it’s exploding and it’s really becoming its own field... Nanotechnology has entered

every part of engineering.”

“Part of the reason why people keep using the Harvard facilities is

MIT.nano, Page 14

Four MIT faculty elected to the National Academy of Sciences

Four MIT professors are among the 84 members newly elected to the National Academy of Sciences this year, according to an MIT News Office press release. The new members, announced Tuesday, are economics professor Daron Acemoglu, brain and cognitive sciences professor Emery Brown, biology professor Alan Grossman, and Earth, Atmospheric, and Planetary Sciences professor Timothy Grove.

Including these new members, MIT now claims 77 MIT faculty members who have been elected to NAS.

According to the NAS’s announcement, new members are elected “in recognition of their distinguished and continuing achievements in original research.” There are now a total of 2,214 active NAS members.

Daron Acemoglu is the Elizabeth and James Killian Professor of Economics. His research centers on economic development, political economy and economic growth theory. Acemoglu is a co-author of *Why Nations Fail: The Origins of Power, Prosperity and*

Natl. Academy, Page 11

Six Mass. colleges scrutinized for sexual assault case handling

*Harvard College and Law School, Emerson College,
Boston University among 55 schools named by feds*

By Evan Allen
THE NEW YORK TIMES

In an unprecedented move, the U.S. Department of Education released a list Thursday of 55 colleges across the country — including six in Massachusetts — facing federal investigations into their handling of sexual assault and harassment complaints.

Harvard College, Harvard Law School, Boston University, Emerson College, Amherst College, and the University of Massachusetts Amherst are among the schools under scrutiny for compliance with Title IX, a federal law that prohibits gender discrimination. Also on the list are two other New England schools, the University of Connecticut and Dartmouth College.

The publication of the list, tied to a White House push to hold col-

leges more accountable for how they handle sexual assault cases, was praised by students who want to increase attention on the problem.

“I think if people know and understand what’s going on, and they know what’s happening, they can demand change for their schools,” said Sarita Nadkarni, 22, who was among several Emerson students who signed a complaint against the school last year accusing officials of failing to properly respond to their reports of sexual assaults. Emerson has pledged to improve its response to allegations of such attacks.

Meanwhile Thursday, more than 100 Tufts University students rallied on the Medford campus in the wake of a ruling earlier this week by the Department of Education’s Office for Civil Rights that the

school is violating Title IX and not doing enough to ensure the safety of students. The protesters staged a rally then planted themselves on the academic green, holding signs and wearing T-shirts that read “I stand with survivors.”

Students were demanding Tufts improve both prevention efforts and its investigations and discipline in assault cases. Equally important, according to Leah Muskin-Pierret, 19, a sophomore who helped organize the rally, is pressing the university to admit assaults are a problem on campus.

“That’s what’s most disgusting,” she said. “Tufts is basically saying, ‘Sorry, federal government, you’re wrong.’”

Yet by the end of the day, student organizers released a joint

Title IX, Page 12

SPRINGFEST 2014 PG. 9



LANDON CARTER—THE TECH

The bassist for Scavenger Hunt performs on Saturday, April 26 for MIT’s annual SpringFest Concert.

IN SHORT

Seniors in MIT Civil and Environmental Engineering Senior Design (1.013) will present their final project — Clarity — on Tuesday, May 6. Clarity is an air quality sensor network deployed on MIT’s campus. The event will be held from 4-5 p.m. with a post-event reception in 46-3002, the Brain and Cognitive Sciences Building.

The Cambridge Police Department is holding a free on-bike training session on Sunday, May 10 at 2 p.m. at the Alewife T Station Bike Cage. The training will cover the basics of riding a bike, and is geared toward new bike riders.

Want to learn more about MIT.nano? Prof. Vladimir Bulovic and other members of the project team will hold a community meeting on the new facility next Mon-

day, May 5 from 3-4 p.m. in 1-190 and Tuesday, May 6 from 2-3 p.m. in 10-250.

Pre-registration is now open! Students must start the process before Monday, June 16 in order to avoid a late fee. Students can change selections until 5 p.m. on Tuesday, Aug. 19. Pre-registration can be completed on WebSIS.

Send news information and tips to news@tech.mit.edu.

DEBUGGING

No, like, seriously. De-bugging. FUN, p. 5

EXTREMES OF BALLET

Interview with dancer in *Pricked*. ARTS, p. 8

THE KNIFE IN BOSTON

Swedish group shakes things up. ARTS, p. 7



HOW TO SPEND YOUR BITCOIN

UPPERCUT gives some gentle suggestions on how to spend your \$100 worth. FUN, p. 5

TECHDOKU

Seriously. It’s a Friday. You don’t have anything to do. Do a Techdoku. FUN, p. 6

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Report: Transparency in online data collection needed

By David E. Sanger and Steve Lohr
THE NEW YORK TIMES

WASHINGTON — The White House, hoping to move the national conversation on privacy beyond data harvesting by intelligence agencies to the practices of companies like Google and Facebook, released a long-anticipated report on Thursday that recommends requiring private companies to release information they gather from their customers online.

The report, whose chief author is John D. Podesta, a senior White House adviser, is part of the administration’s reaction to the disclosures of global surveillance by Edward J. Snowden, the former contractor for

the National Security Agency. The effort is viewed with suspicion in Silicon Valley, where companies see it as the start of a government effort to regulate how they can profit from the data they collect from email and Web surfing habits.

The report focuses on mosaic techniques that allow companies, in the guise of collecting anonymous data from large groups of users, to identify an individual’s activities online.

The report suggests steps Congress could take, including a mandatory system that would force firms to report data breaches — like the one that led to the theft of credit card data from 100 million Target customers last year. A similar measure failed two years ago as part of a broader cy-

berprotection bill.

The report also recommends extending U.S. privacy rights to foreigners, on the theory that there are no boundaries when it comes to the data collected online. President Barack Obama declared in January that the government would do the same in the treatment of data it collected through the NSA and other intelligence groups.

Podesta, said the president was surprised during his review of the NSA’s activities that “the same technologies are not only used by the intelligence community, but far more broadly in the public and private spheres because there is so much collection” from the Internet and smartphones. “You are shedding data everywhere,” Podesta said.

Seeking court’s help, GM hopes to stop suits

By Hilary Stout and Bill Vlasic
THE NEW YORK TIMES

An unusual meeting took place this week at a law office high in a Times Square skyscraper. Lawyers from about 100 law firms participated, either in person or by phone. The agenda: solidifying a strategy for taking on General Motors in bankruptcy court.

Less than five months after declaring the era of “Government Motors” over and done with, the new GM, which just completed its 17th consecutive profitable quarter, will

be back before Judge Robert E. Gerber in the U.S. Bankruptcy Court of the Southern District of New York Friday, girding for a new fight.

On the surface, GM is merely asking the judge to enforce a provision of its July 10, 2009, bankruptcy reorganization that insulated the “new” company from lawsuits stemming from accidents that occurred before that date.

But the reason for the request is far from routine. The company is trying to shut down a rising tide of class-action lawsuits stemming from its recall of 2.6 million cars because

of a dangerously defective ignition switch that it now links to 13 deaths. Asking a judge to enforce part of a restructuring happens in many bankruptcy cases. But in this situation, some bankruptcy experts say, it may be a risky move. Objections have poured into the court from plaintiffs in cases around the country alleging that the company committed fraud during the bankruptcy proceedings five years ago by not disclosing the potential liabilities from the faulty switch, a problem it now admits was known in parts of the company for more than a decade before the recall.

With security tight, Iraqis cast votes in unaccustomed peace

BAGHDAD — Millions of Iraqis voted for a new Parliament on Wednesday, defying threats from Islamist extremists, in an election that was carried out, by Iraq’s brutal standards, in remarkable peace.

After a surge in violence leading up to the vote, and threats by a Sunni extremist group, the Islamic State of Iraq and the Levant, to strike polling sites, no attacks were reported in Baghdad, and none with any large numbers of casualties were reported elsewhere in the country.

The election, the first nationwide vote since the departure of U.S. troops more than two years ago, was seen as a referendum on Nouri al-Maliki’s eight years as prime minister as he seeks a third term amid a growing Sunni insurgency that has brought the country to the edge of a new civil war. But with results pending, the story Wednesday was simply that the election was held at all, and that so few people were killed.

—Tim Arango and Duraïd Adnan, *The New York Times*

Email suggests White House strategy on Benghazi

WASHINGTON — A newly released email shows that White House officials sought to shape the way Susan E. Rice, then the ambassador to the United Nations, discussed the Middle East chaos that was the context for the attack on the U.S. diplomatic mission in Benghazi, Libya, in 2012.

The email dated Sept. 14, 2012, from Benjamin J. Rhodes, the deputy national security adviser, to Rice was obtained by the conservative group Judicial Watch through a Freedom of Information Act request. The subject of the email was: “PREP CALL with Susan.”

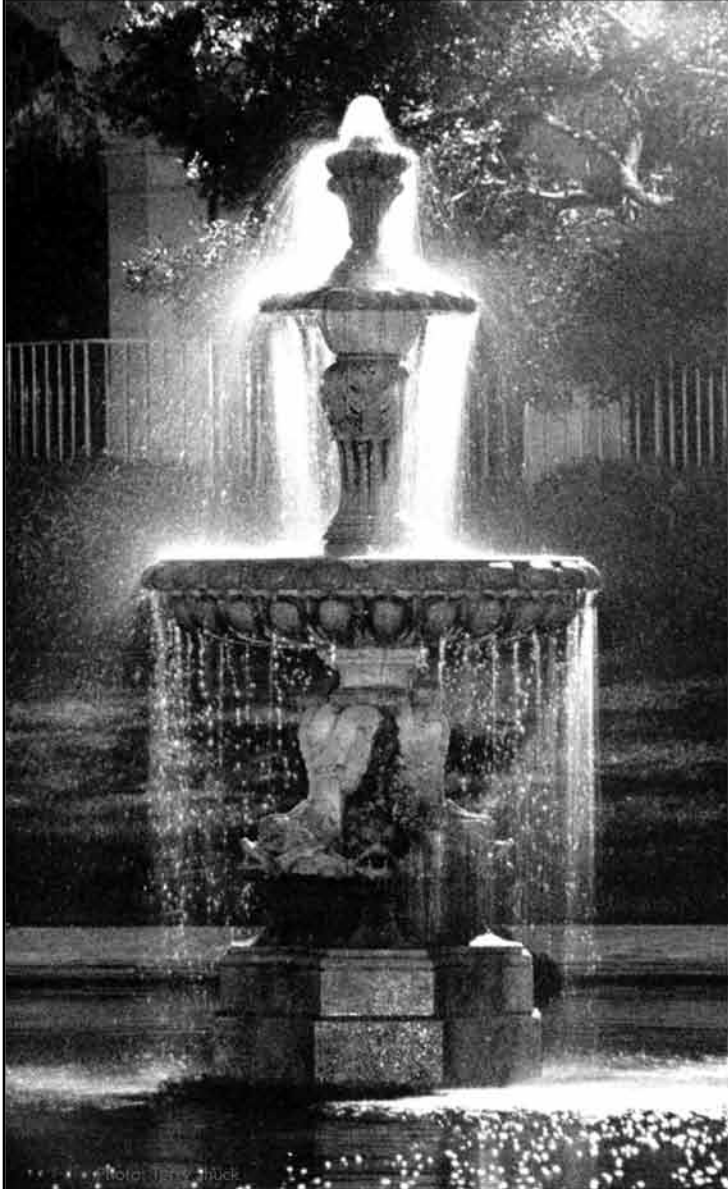
That email was sent ahead of Rice’s appearance on several Sunday morning news talk programs three days after the attacks that resulted in the deaths of four Americans, including J. Christopher Stevens, the ambassador to Libya.

The email from Rhodes includes goals for Rice’s appearances on the shows and advice on how to discuss the subject of the protests that were raging in Libya and at other U.S. diplomatic posts in the Middle East.

Among the goals that Rhodes identified: “To underscore that these protests are rooted in an Internet video, and not a broader failure of policy.” In a section called “Top-lines,” Rhodes added: “Since we began to see protests in response to this Internet video, Jay Carney, the White House press secretary, dismissed the new email as irrelevant, saying that the subject of the advice from Rhodes in the email was not about Benghazi but rather about the protests that were taking place across the Middle East at the time.

—Michael D. Shear, *The New York Times*

STILL THIRSTY?



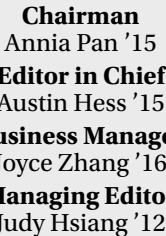
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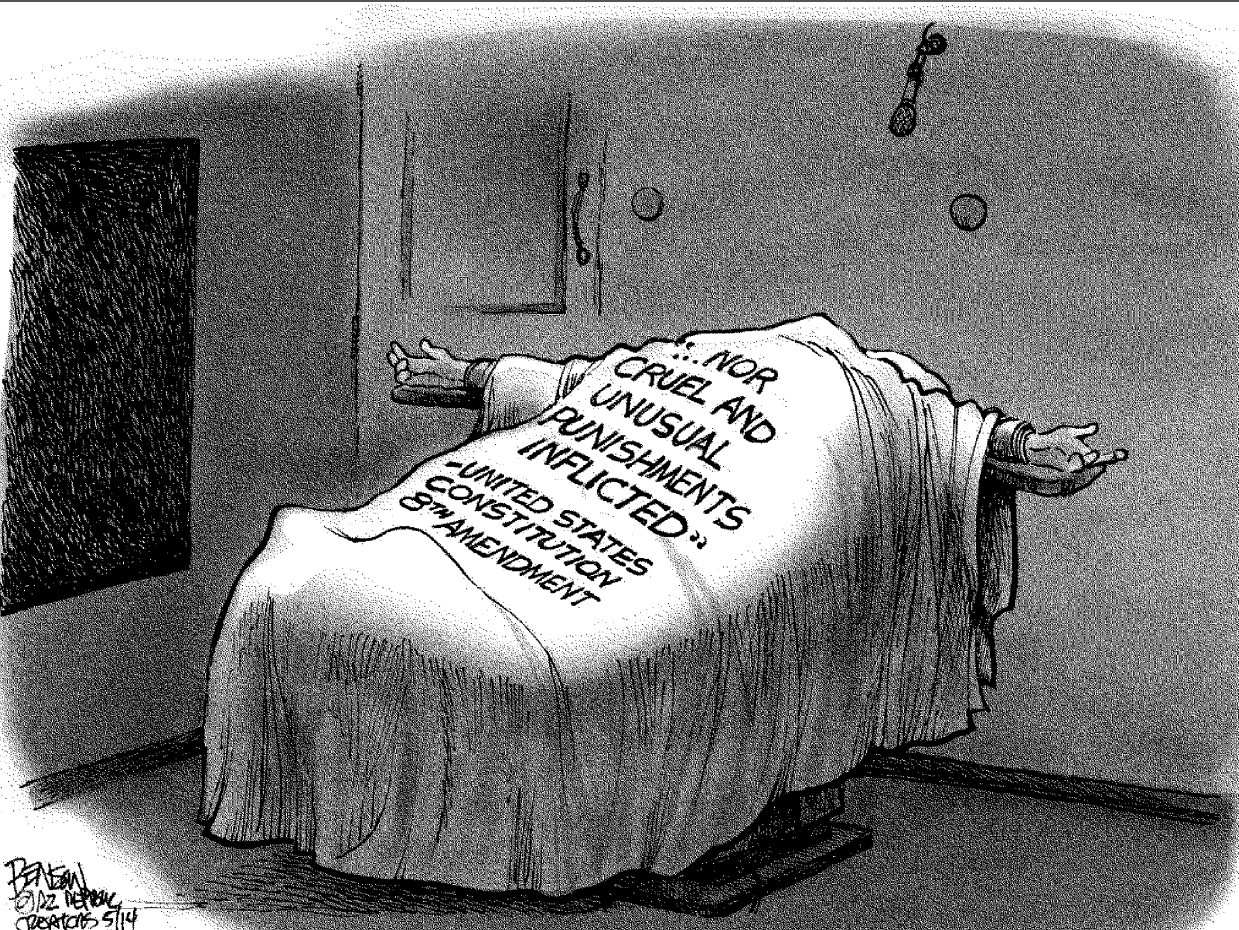
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The print version of an article in the Tuesday, April 29 issue of *The Tech* incorrectly suggests that Professor Simon Johnson is involved with Rubin and Elitzer's project.

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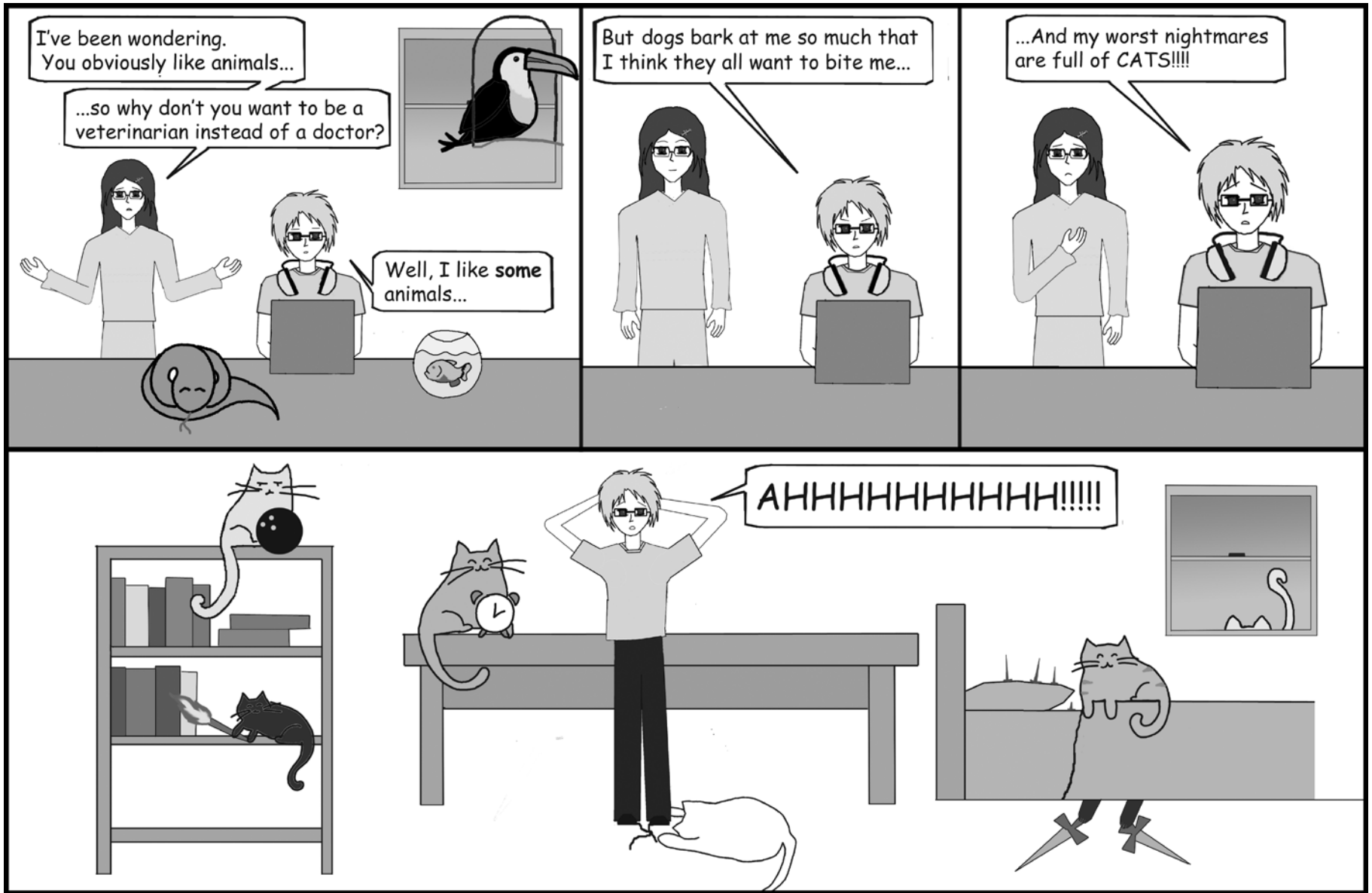
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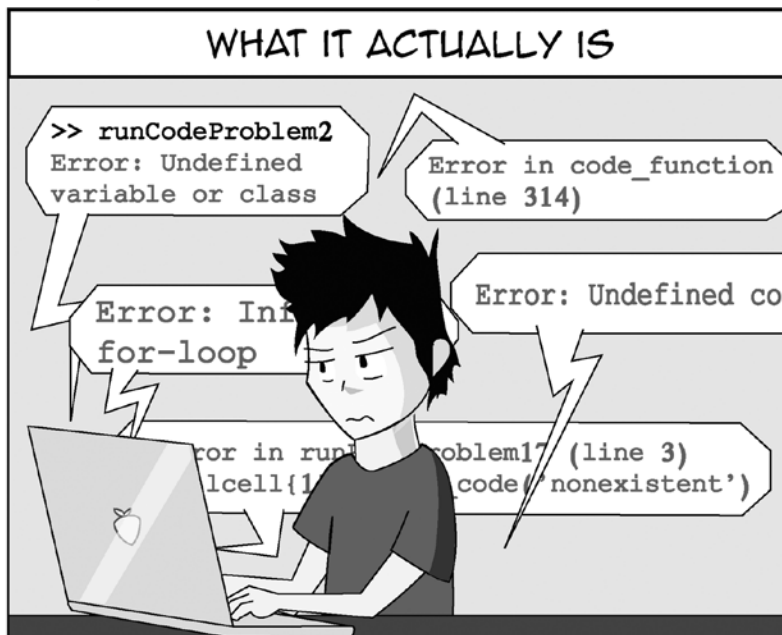


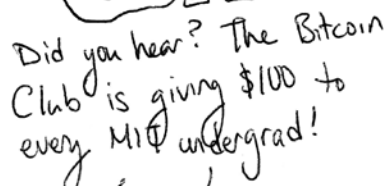
Somewhere on the Search for Meaning... by Letitia Li



Q.E.D. (QUITE EASILY DONE)

BY ERIKA TRENT





Solution, page 14

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Solution, page 14

Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.

Solution, page 14

1 __ Strip (Mideast region)
5 Barbershop touch-up
9 Play, as a ukulele
14 Wickedness
15 Tube-shaped sandwich
16 Tot's vehicle, for short
17 In like-new condition
18 Give off
19 Ran fast
20 Ness, Lomond, etc.
23 Cereal grain
24 Verse of praise
25 No longer crisp
29 Electrical power glitch
32 Hiatus
35 Catches sight of
37 Memoir, for short
38 Tableland
39 Features of cars' rear doors
42 Modern phone, for short
43 Olive of the comics
44 Bits of snow
45 Louvre display
46 Versifiers
48 Battery terminal

50 Prepare for battle
52 Fish served on bagels
59 Put restrictions on
60 Rotation line
61 Desertlike
63 Join forces
64 "A __ formality!"
65 Do some darning
66 Barred to outsiders
67 Tip-jar fillers
68 Swampy grounds

- 1 Jewel
- 2 Hertz rival
- 3 Metal in brass
- 4 Palo ___, CA
- 5 Letter before iota
- 6 Sends payment
- 7 Colored part of the eye
- 8 Closet pest
- 9 Walked briskly
- 10 Tiny amount
- 11 High in calories

13 Prescription, for short
21 Trifled (with)
22 Exit the Web
25 Tourist magnet
26 Wedding aide
27 Overflowed
28 Cyclist's challenge
30 Letter-shaped fastener
31 Spaniard's river
32 Small lizard
33 Queried
34 Out of style
36 SNL fare
38 Complain, so to speak
40 Cereal grain
41 Camel's Peruvian
cousin
46 Coated, as with metal
47 Irreverent fiction
49 Facebooker's party
notice
51 Gets promoted
52 Ship of 1492
53 Don't include
54 Hunter's garb, for short

55 Plow pullers
56 Meat in moussaka
57 Creme-filled snack

58 PED ____
59 Drag around
62 Oral care deg.

CONCERT REVIEW

Let's talk about gender

The Knife's new tour comes to Boston



IAN PEARCE

The Knife performed at **Boston's House of Blues** this Monday as part of their "Shaking the Habitual" tour.

By Denis Bozic

ARTS EDITOR

How would you feel if you went to a concert where a performer dressed as an aerobics instructor with tights, a wig, and glittery shorts asked you to repeat, "I am not a woman, I am not a man, I am both, I am neither, if you don't like it, take a breather?"

This is how The Knife opened their show this Monday, when their “Shaking the Habitual” tour arrived to Boston’s House of Blues. The Swedish sibling duo, known for their political and ideological music, brought an ensemble of dancers and performers for their new show, which received polarized reviews from both the fans and the critics. The range of opinions was notable from the beginning of the show, when the costumed instructor asked the audience to let go of their self-consciousness, hold the hands of those standing next to them, and yell, “Participation, across every nation.” It became obvious that the show was not going to be everyone’s cup of tea.

Karin Dreijer Andersson and Olof Dreijer released their latest album *Shaking the Habitual* last year after seven years of unexplained hiatus. Whereas their previous albums showcased intellectual but accessible music, the new album was a challenging

collection of tracks that directly addressed political and philosophical topics through unconventional instrumentation and occasionally cacophonous, exhausting music.

The post-hiatus transformation is visible in their new show as well. Unlike the previous tours, where the focus of the show was on live performance and the duo's masked physical appearances, the new tour does not emphasize live instrumentation nor the duo's stage personalities. Instead, Andersson and Dreijer share the stage with a dozen of dancers and performers, their faces are revealed, and almost half of the concert is a choreographed, eccentric show with playback music. To new listeners, The Knife would seem like an ensemble of performers rather than a musical duo.

Sounds like a waste of money, right? You can easily stay home and watch the concert on YouTube if they are not going to play a full live set. But that's the essence of "shaking the habitual" — breaking the stereotypical concept of a good and entertaining concert. You might be accustomed to seeing a local band open for one of your favorite artists, but The Knife challenged preconceptions by bringing a drag queen to the show who asked audience members to acknowledge others around them for what they are and to participate in the performance,

because they should, as the performer described it, “move to be moved.”

Indeed, most of the concert was an unconventional set of colorful light show, tribal dance moves, distorted singing, sparkly makeup, and jovial choreography. Even though many songs were not performed live, the accompanying choreographies were well-executed and truly captivating. “Full of Fire” featured a dark light set and freestyle dance moves, while “One Hit” showcased a rhythmic pop-based choreography full of kissing and juvenile steps that resembled the hokey pokey.

It might be hard to understand how these satirical and amateur choreographies were complementary to lyrics such as “For a reasonable salary, I would wash the world, it wouldn’t affect my libido or self-esteem,” or “Let’s talk about gender, baby, let’s talk about you and me.” But, The Knife gave a clear and compelling reason why these ideas were transmitted through a theatrical show and not through a regular concert — because it’s easier to convey difficult concepts to people through choreography and dance music than through other forms of art.

The new show was not devoid of The Knife's usual themes and messages. While the political connotations were only noticeable if one paid special attention to the lyrics and the interludes, the gender-based topics could be clearly seen in the choreography and the visuals. All the male performers, including Olof Dreijer, wore glistening makeup and the same body suits as the female performers. Almost all the choreography defied the concept of "masculine" or "feminine" movements.

For example, during few songs, both the male and the female dancers engaged in very aggressive, tribal dance movements, after which they all switched to graceful and sophisticated rhythmic body gestures. There was a moment in the show where two couples performed the cha-cha-cha, presenting the basic steps such as “Chas-sé,” “New York,” and “Spot Turns.” It was clear that The Knife found an opportunity to introduce the concept of gender fluidity through ballroom dancing, because the performers were dancing with others of the same gender.

It is very easy not to like this show. Despite the entertaining choreographies and

★★★★★

The Knife

Shaking the Habitual Tour

Monday, April 28

House of Blues, Boston

few standout live tracks such as “Pass This On” and “We Share Our Mothers’ Health,” some aspects of the concert were not so successful. The distorted vocals were very distracting at times, and some of the slower songs, like “Wrap Your Arms Around Me,” unnecessarily mellowed down the upbeat character of the show.

Furthermore, this was not an accessible concert. Compared to the studio versions from *Shaking the Habitual*, the live renditions of the songs were easier to understand and internalize, but the show still contained many challenging topics and ideas that were hard to process in only ninety minutes. Nevertheless, “Shaking the Habitual” tour is a fun, unique, and memorable show that’s different from anything you have ever seen before. It will force you to participate, offer you the chance to appreciate discordant and unconventional music, and — most importantly — encourage you to become someone who is willing to shake the habitual.



COURTESY OF THE KNIFE

The Knife's official video of "Raging Lung" performance from their "Shaking the Habitual" tour in Stockholm.



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**We print MIT's only newspaper twice per week,
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Boston Ballet dancer speaks with *The Tech*

STAFF WRITERS

— *Patrick Yocum*
BOSTON BALLET DANCER

PY: Cross-training is very important these days in the dance world. I do car-



Pricked will be performed by the Boston Ballet at the Boston Opera House on May 8-18.



join@tech.mit.edu



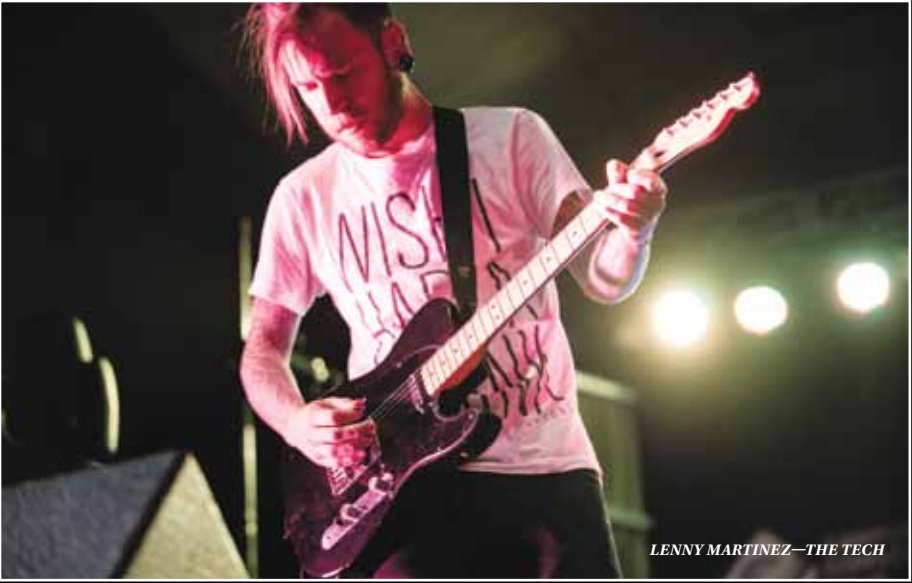
LANDON CARTER—THE TECH



LANDON CARTER—THE TECH



LANDON CARTER—THE TECH



LENNY MARTINEZ—THE TECH

- 1. Guards scan the crowd as the indie pop band Capital Cities performs a lively set behind them.
- 2. A large number of students streamed in to watch the performances at Springfest, especially for the last set by Flosstradamus.
- 3. Lead vocalist for Scavenger Hunt performs on Saturday, April 26 for MIT's annual SpringFest Concert.
- 4. The lead guitarist for the Los Angeles band Scavenger Hunt plays a solo during Springfest's first set.
- 5. The crowd goes wild as the Chicago-based DJ duo Flosstradamus blasts a bass-heavy medley of songs.

1

2

3

4

5

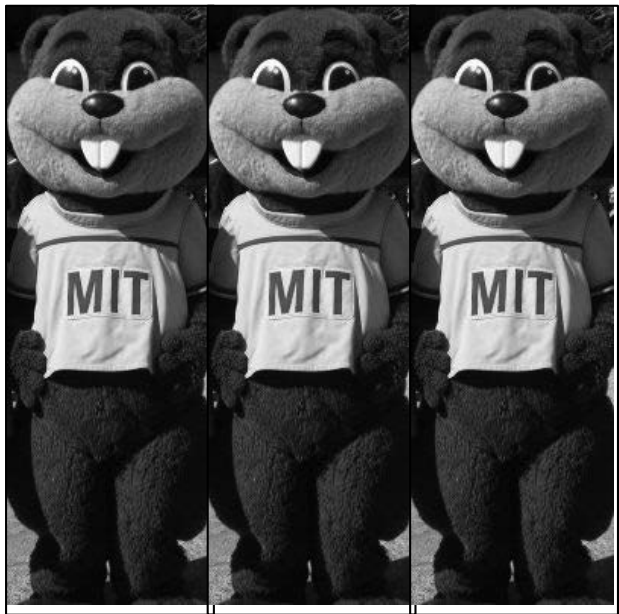


LANDON CARTER—THE TECH



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Sundays & Memorial Day 10:00am-2:00pm

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Natl. Academy, from Page 1

Poverty, an investigation of the underlying causes of state economic success and failure. According to the MIT News Office, Acemoglu was awarded the Erwin Plein Nemmers Prize in 2012 for his contributions to understanding political institutions, technical change and economic growth.

Professor Emery Brown, the Edward Hood Taplin Professor of Medical engineering, holds joint posts at MIT, Harvard Medical School, and Massachusetts General Hospital as an anesthesiologist-statistician. His work focuses on developing neural signal processing algorithms for data analysis in neuroscience. He has also researched the neurological basis of general anesthesia. According to MIT's press release, Brown is a member of the Institute of Medicine of the National Academies and a recipient of the NIH Director's Pioneer Award in 2007.

Alan Grossman, the associate head of the Department of Biology, employs a wide range of biological approaches to study how *Bacillus subtilis*, a bacterium, recognize and respond to internal and external stimuli. Grossman's research has focused on how these bacteria engage in cell-cell signaling, integrate physiological signals, control transcription and regulate DNA replication, according to MIT. Grossman has served as a fellow of the American Academy of Arts and Sciences since 2008.

Timothy Grove is the Cecil and Ida Green Professor of Earth and Planetary Sciences. His work focuses on planetary evolution, from the chemical differentiation of the Earth's crust and mantle to the formation of the core of the Moon and Mars. He served as the president of the American Geophysical Union from 2008 to 2010 and is a fellow of the American Academy of Arts and Sciences, according to MIT.

The NAS also announced Tuesday the election of 21 foreign associates from 15 countries, who are non-voting members with non-U.S. citizenship.

—Will Conway and Austin Hess

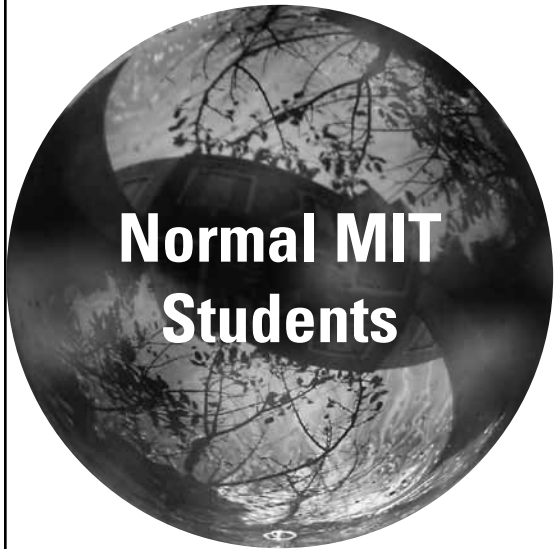
Brooms and bludgers on Kresge Lawn



ALEXANDER C. BOST—THE TECH


The MIT Marauders square off against the Harvard Horntails in a friendly game of Quidditch this past Sunday outside of the Student Center. Based on the game from the Harry Potter series, the muggle version (usually) features slightly less flying.

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Feds to investigate Boston-area colleges

Six colleges in the state under scrutiny for possibly violating Title IX

Title IX, from Page 1

statement with the university pledging to work together on the issue. The university said it expects to be able to work out its differences with the Office for Civil Rights, and pledged a series of actions including a promise to review this summer the university's guidelines for disciplinary sanctions.

The Obama administration this week drew national attention to the problem of campus sexual assaults, saying one in five college women are victims of assault or attempted assault. A White House task force released a series of new guidelines for how schools should address the problem, including conducting surveys about the prevalence of sexual assault on their campuses, better training for administrators on how to work with victims, and making sure victims have the option to maintain confidentiality.

Making more information available to students was also a major focus, and the White House unveiled a new website, *notalone.gov*, offering resources for victims and information about prevention.

Even before Obama appointed the task force in January, his administration had made the issue

more of a priority than it had been in previous years. Guidelines released in 2011 encouraged more students to file complaints against their institutions for not handling their cases properly, which helps explain the large number of colleges being investigated today.

Many university officials, however, believe the administration's move to announce the schools under investigation is singling them out when they have not been found to have done anything wrong.

"There is a view that it's unfair to the institutions because they can't really try to explain it away in any fashion or answer it," said Ada Meloy, general counsel of the American Council on Education. "They need to be protecting the confidentiality of the student who may have complained."

According to a Globe review of Boston-area campuses in February, the number of reported forcible sex offenses rose by nearly 40 percent between 2008 and 2012.

For most of the universities in Massachusetts that are on the federal list, the probes had been previously reported in the media, but that was not the case for BU or UMass Amherst.

The Department of Education

does not release any information about ongoing inquiries beyond the name of the institution and the date the investigation began. Some alleged victims publicize their allegations, while others choose not to.

UMass Amherst said it is on the list not because of a specific complaint but because of a compliance review that began in 2011. In a statement, the university pledged its dedication to preventing sexual assault, for example, by training students on how bystanders can prevent violence.

According to Dorie Nolt, press secretary at the Department of Education, compliance reviews are "not random audits of schools," but launched based on data, news reports, or information from parents and advocacy groups "in order to remedy possible violations of students' rights."

In 2010, the Globe published a report from the New England Center for Investigative Reporting that a UMass student who confessed to raping a friend was allowed to remain enrolled and avoid significant discipline. The school acknowledged the error and said it led to changes in the disciplinary process.

A spokesman for Boston Uni-

versity said Thursday that its inclusion on the list stems from a complaint filed last October.

"While we believe the University provided the student with a prompt and equitable resolution of the complaint in full accordance with the requirements of Title IX, we are cooperating fully with OCR in its investigation and are always open to improving the manner in which we respond to any complaint of sexual misconduct," spokesman Colin Riley said.

The investigation into Harvard College was launched only last week, after a group of students filed a complaint asserting that Harvard has created a hostile environment for assault victims.

The Harvard Law School investigation has been open since December 2010. In 2011, attorney Wendy J. Murphy said she filed the complaint because the law school had policies that violated federal regulations, including waiting to address complaints until police and prosecutors had finished investigating, a practice she called "running out the clock," since the alleged victim might graduate in that time frame.

Globe correspondent Matt Rocheleau contributed to this report.



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Call for Nominations

2014 School of Science Teaching Prizes for Undergraduate and Graduate Education

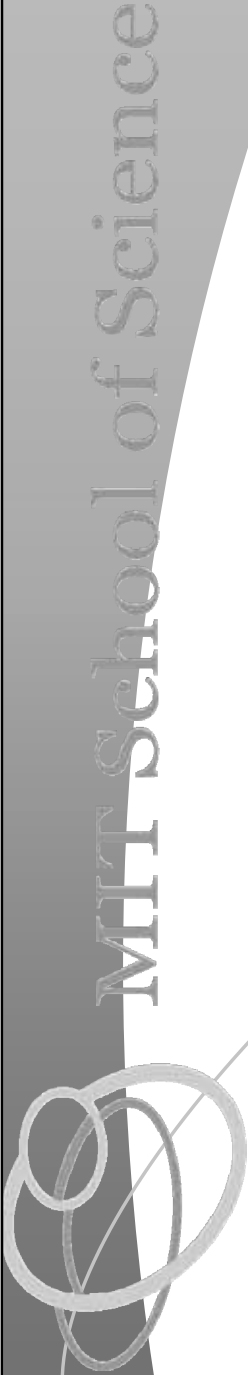
The **Teaching Prize for Undergraduate Education** recognizes outstanding teaching not only in the undergraduate subjects with large enrollments (such as those that satisfy the General Institute Requirements in science), but also in upper-level science subjects in which enrollments are smaller.

For the **Teaching Prize for Graduate Education**, preference will be given to nominees who teach mainstream subjects in which fundamental principles of the relevant fields are presented. Such courses typically provide the basis for advanced education and research and prepare students for professional careers.

Nomination letters from either faculty or students are welcome. Letters should indicate the name of the nominee, course taught, and reasons for nomination. Although one strong letter is sufficient, additional letters will strengthen the nomination.

Please submit nominations at <http://science.mit.edu/teaching-prize-nomination-form>. Nominations are due May 28, 2014.

For additional information please contact:
Annie Lee, School of Science, 6-131, ayl@mit.edu, 617-253-5951





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Ethan: What's up?

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Susie: Cool, but what if I don't know that much yet?

Ethan: We've got people who can help you out.

Ethan: E-mail join@tech.mit.edu and we'll send you more info!



MIT.nano facility construction will begin in June

Pedestrian and bike traffic near Building 12 will be cut off; facility to open in spring 2018

MIT.nano, from Page 1

because our facilities are crowded,” explained Anikeeva. “If there’s a line of, you know, 300 people trying to use [a piece of equipment], sometimes it’s easier to go to Harvard, and that’s what people do. Our students are really productive and they want to be in the fab all day long fabricating things, and all night long potentially. We just do not have the sheer space and the quantity of machines to be able to accommodate that type of intense traffic.”

With the new 200,000-square-foot building, Bulovic anticipates that there will be enough lab space for both MIT researchers and external users, such as startups and large companies.

Fundraising is currently ongoing for the project, and has involved MIT researchers advocating the importance of their research,

according to Prof. Kripa Varanasi PhD ’04, whose work focuses on nano-engineered surfaces.

Although five campus locations were initially considered, Building 12 was ultimately chosen as the site of construction.

“Having a building being shielded from other road surfaces is very, very valuable,” Bulovic said. “You’re far away from the T line and the railroad line. The T generates a lot of noise, both electromagnetic and mechanical noise. Every five minutes, my experiment would be interrupted.”

Locations on the outskirts of campus were eliminated because MIT did not want to include offices in MIT.nano, which would have taken up valuable lab space. In addition to minimizing the amount of noise and vibrations, MIT.nano will also house cleanroom facilities. According to Bulovic, cleanliness is critical at a scale in which

a dust particle is like “the size of a wrecking ball.”

Bulovic expects the future facility’s central location will allow researchers from all over campus to meet to discuss and share ideas.

“Our ability to innovate comes from the fact that MIT has such an easy way of crossing boundaries. You never have a sense of leaving your own department because everything is connected,” said Bulovic. “MIT.nano is meant to be a gathering community place. It is those impromptu meetings over a water cooler... that spark a tremendous number of ideas, and open up the vision of the opportunities.”

However, MIT.nano’s central location comes at the cost of a difficult construction process. Bulovic compared the construction process to trying to build a ship in a bottle. The daily routine of many MIT community members will likely be affected by the construction.

From now until spring 2018, no bicyclists or pedestrians will be allowed through the road between Buildings 13 and 31. Pedestrians will be able to walk under the overhang of Building 13, but no further. Pedestrians will instead have to go through the Infinite Corridor, while bicyclists will be directed towards Vassar St.

“We’re going to be crimping the style of the number of people,” said Bulovic. “That’s really, really unfortunate. It’s a consequence of wanting to be next to everyone in center campus. If you’re going to build something for center campus, we’re going to have to inconvenience everyone inside center campus as we’re doing it.”

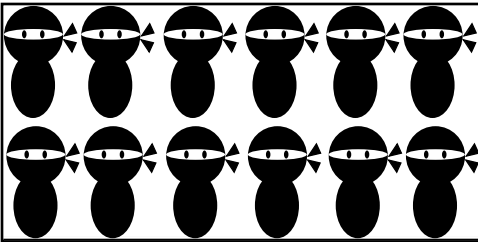
Because of the lack of accessible roads, trucks will mainly only be able to deliver material through the opening under Building 39 at the side of Vassar St. Bulovic expects typical heavy truck traffic to

begin at about 9 a.m. and end at 3 p.m. However, construction itself will likely begin at 6 or 7 in the morning.

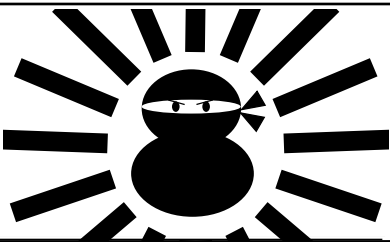
“We’re building a building now that is meant to last 30 years,” said Bulovic. In the long term, he expects that the building will stand for 150 years, with periodic renovations in between.

Bulovic and other members of the project team will present their facility design and upcoming construction activities at a community meeting next Monday, May 5 from 3-4 p.m. in 1-190, and next Tuesday, May 6 from 2-3 p.m. in 10-250.

“Having these facilities right here makes it that much more easy to have the next breakthroughs,” said Varanasi, who also sees MIT.nano as a prime site for nanotech entrepreneurs. “I’m looking at the center as an investment that will lead to not only great science, but also great products.”



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Solution to Techdoku

from page 6

1	6	5	2	3	4
5	4	3	6	1	2
3	2	1	4	5	6
6	5	4	1	2	3
4	3	2	5	6	1
2	1	6	3	4	5

Solution to Sudoku

from page 6

9	7	6	5	1	4	8	3	2
1	3	4	7	8	2	5	6	9
2	5	8	6	9	3	4	7	1
8	2	3	1	7	9	6	4	5
5	6	1	3	4	8	9	2	7
4	9	7	2	6	5	1	8	3
7	8	5	9	3	6	2	1	4
3	4	2	8	5	1	7	9	6
6	1	9	4	2	7	3	5	8

Solution to Crossword

from page 6

GAZA	TRIM	STRUM
EVIL	HERO	TRIKE
MINT	EMIT	RACED
SCOTT	ISHLOCHS	
	OAT	ODE
MUSHY	SURGE	GAP
ESPION	BIO	MESA
CHILD	PROOF	FLOCKS
CELL	OYL	FLAKES
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AWARDS CONVOCATION

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James N. Murphy Award
Donna Friedman, Advising & Academic Programming
John S.W. Kellett '47 Award
Lincoln Laboratory Out Professional Employee Network (OPEN)
Frederick Gardiner Fassett, Jr. Awards
Philine Huizing '14 Haldun Anil '15
Eva "Niki" Edmonds"
Howard W. Johnson Award
Michael Liao '14, Swimming and Diving
Betsy Schumacker Woman Athlete of the Year Award
Cimran Virdi '16, Track and Field
Harold J. Pettegrove Award
Greg Kravit '15
William L. Stewart, Jr. Award
Egyptian Student Association
Anne Cai
Harold and Arlene Schnitzer Prize in the Visual Arts
Anne Macmillian G, ACT
Louis Sudler Prize in the Arts
Albert Wu '14
Laya and Jerome B. Wiesner Student Art Awards
Elly Jessop G Adam Strandberg '14
Floor van de Velde G Grace Young '14
Malcom G. Kispert Awards
Tyler Singer-Clark
Louise van den Heuvel, Cross Country/Track and Field
Bose Award for Excellence in Teaching
Jeffrey Grossman
Patrick J. McGovern '59 Entrepreneurship Award
Andrea Ippolito G
Everett Moore Baker Memorial Award for Excellence in Undergraduate Teaching
Professor William A. Tisdale
Edward L. Horton Fellowship Award
J. Nathan Matias, Department of Media Arts and Sciences

Earl M. Murman Award for Excellence in Undergraduate Advising
Professor Frans Kaashoek, Department of Electric Engineering and Computer Science
Arthur C. Smith Award
Professor Anne EC McCants, School of Humanities, Arts, and Social Sciences
Albert G. Hill Prize
Eloho Akpovi '14 Byran Collazo '14
Nathan Kipniss '14 Suan Tuang '14
Victoria "Ashley" Villar '14
Graduate Student Council Teaching Award
Matt Haberland, School of Engineering
Glenn Ellison, School of Humanities, Arts, and Social Sciences
Frank E. Perkins Award
Jeffrey C. Grossman, Department of Materials Science and Engineering
D. Reid Weedon JR '41 Alumni/ae Relations Award
First Prize - Alpha Chi Omega Second Prize - Zeta Psi
Honorable Mention - Sigma Kappa
Association of MIT Alumnae (AMITA) Senior Academic Award
Aruima Balan '14
Ronald E. McNair Scholarship Award
Camille A. DeJarnett '14 Elise M. Myers '14
Joshua V. Sibblies '14
Priscilla King Gray Award
Jean-Philippe Coutu
Sherry Fu '14
Laya Wiesner Community Award
Borislava (Bori) Stoyanova
Laya W. Wiesner Award
Rachel H. Keeler
Gordon Y Billard Award
Claude Canizares
Roger and Dorothy Mark
Karl Taylor Compton Prizes
Anna Ho '14 Leonid Grinberg '14
Patrick Hulin '14

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